Benchmarking Workship

Benchmarking Workshop

the marking Workshop

For Training Purposes Only 9 June 1996

Abbreviated



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Team Na	ıme:			
Team Le	ader:	Tele:		
Project S	Start Date:			
		s may impact more than one area. Please check the nort description.)		
	Service			
	Product Process			
	Other			
Activity	Sponsor:			
Purpose	of Effort/D	Detailed Description: (Be as specific as possible.)		
•	Term: (Key			
•	ng Authorit			



When you complete this work shop you should:

- Have a better understanding of the steps involved in a Benchmarking Study
- **■** Understand the Benchmarking Methods
- Understand the Benchmarking Code of Conduct and Benchmarking Protocol and Ethics
- Understand the different Benchmarking tools
- Understand the Benchmarking jargon
- Understand the necessity for preparation and extensive research



Is the continuous search for excellence through comparative analysis followed by process improvement.

Is the continuous and systematic process of identifying, analyzing, and adapting industries' best practices that will lead an organization to superior performance.

Is the practice of being humble enough to admit that someone else is better at something, and being wise enough to learn how to match and even surpass them at it.



There are several reasons why an organization might benchmark. Some of the more common are to:

- Satisfy customers' needs and expectations
- Discuss and understand the methods and practices needed to reach new goals
- Achieve superior performance
- Adapt best practices
- **■** Develop strategic goals
- Keep informed on the state-of-the-art business practices
- Encourage creative thinking get out of the box
- **■** Competitive comparisons



Benchmarking Is:

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- **☑** A discovery process
- oxdot An improvement method
- **☑** A source of breakthrough
- ☑ A learning opportunity
- **☑** An objective analysis
- ☑ A process-based analysis
- **☑** Management commitment
- **☑** Continuous



Benchmarking Is NOT:

- **☒** A cookbook process
- **☒** A panacea for problems
- **☒** Comparing to "similar" organizations
- A management fad
- **☒** Just a review of own operations
- **▼** Just measurement
- **☒** Just quantitative
- **☒** Industrial Tourism
- **☒** A free trip
- **E** Reinventing the wheel



Benchmarking should be considered because of:

- **■** Management changes
- New or changing operations
- **■** Changing industry dynamics
- **■** Continuous improvement
- Changing or adapting to new processes, products, or services
- **■** Process redesign initiatives
- **■** Survival



Where can I research leaders of industry:

- Agency Experts
- **■** Congressional Quarterly
- National Technical Information (NTIS)
- Center for the Utilization of Federal Technology (CUFT)
- National Institute of Standards and Technology (NIST)
- Annual Reports maintained by the U.S. Securities and Exchange Commission (SEC)
- **■** Best Practice Data Bases
- Strategic Planning Institute's Council on Benchmarking
- The Navy Best Manufacturing Practices Data base
- **■** The Benchmarking Exchange
- National Center for Manufacturing Sciences
- Wharton University Environmental Forum
- International Benchmarking Clearinghouse (IBC)
- **■** Council for Continuous Improvement (CCI)
- **■** Colleges/University libraries
- **■** Consultants

- **■** Professional Associations
- **■** Articles/Periodicals
- On-line data bases
 - * DIALOG
 - * INTERNET
 - * BENCHNET
- Malcomb Baldrige Office



Some of the Benefits of Benchmarking are:

- $\overline{\mathbf{V}}$ A better understanding of products and services $\overline{\mathbf{V}}$ A better understanding about customers needs and expectations $\overline{\mathbf{V}}$ Meaningful goals and performance measures reflecting customer requirements $\overline{\mathbf{Q}}$ **Employees who strive for excellence and promote** breakthrough thinking $oldsymbol{
 em}$ **Employees who better understand the internal** processes within their organization while increasing the sensitivity to changes in customer needs
- **☑** The accelerated rate of change within an organization
- ✓ A better understanding of competitors and industry dynamics



Some benchmarking tips are:

- → Select the right team and mix of skills
- → Team should have adequate understanding of process under study
 - * Helps you have a realistic perspective of your process
 - * Helps you understand the smaller activities included in the overall processes
- → When selecting benchmarking partners, do not confine yourself to companies in your own industry
- → Provide an incentive for a potential partner to participate
- → Focus on best practices, not just measurements
- → When selecting your benchmarking team include supporters and skeptics alike



Some critical benchmarking mistakes are:

X	Own	process	not	examined
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- **"Feel Good" trips**
- **Soals and questions too vague**
- **Scope too broad**
- **Example 2** Lack of team commitment
- **☒** No upfront research
- **▼** Wrong benchmarkee
- **☒** Didn't go outside of own industry
- **➣** No action taken





Method	Description	<u>Advantages</u>	Disadvantages
Internal	An approach to benchmarking where organizations learn from "sister" companies, divisions, or operating units. Performance improvement may be 10 percent.	 Provides highest degree of process detail and simplified access to process information. Provides rapid and easy-to-adapt improvements. 	The internal focus tends to be operational rather than strategic, and bound by the organization's cultural norms.
Competitive	An approach to benchmarking that targets specific product designs, process capabilities, or administrative methods used by one's direct competitors. Performance improvement may be 20 percent or better.	 Provides a strategic insight into marketplace competitiveness and can provide a "wake-up" call to action. Prioritizes areas of improvement according to competition. 	 Legal issues regarding business relations between competitors may become an issue. The detail from the study may be insufficient for diagnosis.
Functional	An approach to benchmarking that seeks information from the same functional area within a particular application or industry. Performance improvement may be 35 percent or better.	Takes advantage of function and professional networks to develop detailed process understanding.	- Although an external perspective is used, the functional concentration tends to best support operational studies.
Generic	An approach to benchmarking that seeks process performance information from outside one's own industry. Enablers are translated from one organization to another through the interpretation of their analogous relationship. Performance improvement may be 35 percent or better.	 Provides the greatest opportunity for process breakthroughs. Because organizations don't compete, reliable detailed information is usually available. 	 Difficulty in developing an analogy between dissimilar businesses. Difficulty in understanding which companies to benchmark.





What type of Benchn	narking Study?
	Competitive Assessment (2-4 weeks)
_	Fast Track Benchmarking (90 days)
_	Benchmarking (6-9 months)
Does management un	derstand benchmarking?
	Yes
	No
Is management comn	nitted?
	Yes
	No
	narking study tie into the strategic pla
Who are my customer	
	Top Management
	The General Public

What is driving t	he be	enchmarking study?
		A different/new process
		Improvement over current ways of doing
		things
		_
		· · · · · · · · · · · · · · · · · · ·
What are we goir	ng to	benchmark?
6		Products
	\Box	Services
		Other
	H	Other
	Ш	
What resources a	re co	mmitted to the study?
		Equipment
		Space
What resources a	re ne	eeded for the study?
What resources a		reded for the study.
	Ш	
How is the infor	matio	on to be used?
		To stimulate breakthrough thinking
		To compare products/processes
		To find new and innovative ideas
		Other

Team Agreement

What is the need for a "Team Agreement"?

The "Team Agreement" is a tool to help you and other team members gather up-front information about the team and your role within it.

In order to take a leadership role within the team and to contribute to its success, you need to have a clear understanding of:

- Why the team was formed
- How the team and its work fit into the larger organization
- What the performance expectations are for the team

Later on, when significant changes occur within the team or within the larger organization, the "Team Agreement" will help you review this essential information again.

When should the team use the "Team Agreement"?

Specific cues the team should watch for are:

- Starting a new project
- Needs to adjust to a change in direction or plans
- Has difficulty meeting deadlines
- Has a new leader
- Is clarifying roles and responsibilities
- Or when the team changes its focus

How is the "Team Agreement" used?

When a new team is forming, the team leader or a senior manager usually gives the team essential background information, including why the team was formed and how the team's mission fits into the organization's mission and goals.

As the team leader or senior manager presents the information, the team should record it on the "Team Agreement". Ask questions to be sure you have all the information you need for a complete response. Ask the team leader, a senior manager, or other team members for the information you need to complete any items where "No" was checked for enough information. The team member section should be completed by each team member individually.

When the team changes direction, the agreement will help you understand the scope of the change and the impact it will have on the team and on the team's purpose or mission.

When you join an existing team, you may want to meet with one or more team members and ask them the agreement questions.

Why is the "Team Agreement" beneficial to the team?

As the team begins to develop and gains experience, refer to the agreement periodically to see if the team's activities still align with its original purpose and goals. Measure your action plans against the agreement.

Once team members have a clear idea of the scope of the team's assignment, individual roles can become more specific and targeted to the desired results.

PROJECT OBJECTIVES

(To be completed as a team)

- 1. What is the team's name, purpose, and scope of responsibility?
- 2. How does that purpose fit into the larger organization's goals/strategies?
- 3. Who will benefit from the efforts of this project?
- 4. What milestones exist for our team?(*Please attach action plan.*)
- 5. What will we measure to determine if our team has been successful? (*i.e., critical success factors.*)
- 6. What is our plan for establishing a baseline and measuring to evaluate success? (*Include time frames*.)

DECISION MAKING

(To be completed as a team)

- 1. What are the limits on our authority to make decisions?
- 2. Who approves decisions that are outside our limits?

TEAM NEEDS/RESPONSIBILITIES

(To be completed as a team)

- 1. What resources will be available to us? (*i.e.*, *people*, *systems*, *budget*, *equipment*.)
- 2. Will we be doing activities that we don't currently know how to do? If so, how will we get the training we need?
- 3. How will we communicate results to our own office and the whole organization?

TEAM MEMBER RESPONSIBILITIES

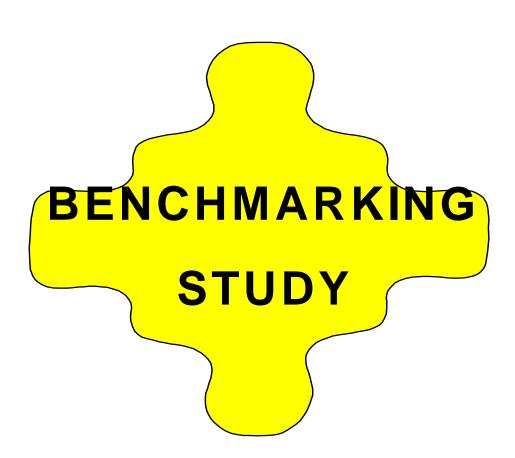
(To be completed by each team member)

- 1. What is my specific role on this team? Long-term responsibilities?
- 2. What time commitment for participation on this team will be required of me? (Meeting days/times, begin/end dates, and hours per week for team related activities.)
- As a member of this team, I will have:
 _____ No change in job expectations, unless later acknowledged by a revised agreement form **
 ____ Will have the following changes in job expectations:
- ** Upon notification by my team leader, I will notify my supervisor if there are any changes to the time requirements.

COMMITMENT

The team receives guidance fromapproval for recommendations fromagreement serves as our pledge of commitment to objectives. If needed, this agreement will be reviappropriate signatures.	
Signatures:	
Employee	Date
Supervisor	Date
Director	Date
Team Leader	Date







Is selecting and defining the process to be studied, obtaining leadership commitment, organizing a team, identifying the process performance measures, and evaluating your current process capabilities.

The eleven steps to follow during the PLANNING stage are:

Select the process
Identify and gain participation of sponsor and
stakeholder
Submit benchmarking request to Benchmarking
Coordinator
Select team members
Obtain Benchmarking Awareness Training
Identify objective of benchmarking study
Identify products/services, customers, and their
expectations
Analyze and document process flow
Establish generic performance measures
Identify/select Critical Success Factors (CSF)
Develop criteria for secondary research

Literature Search Criteria (Internal Questionnaire)

Example:

- 1. What type of organization?
- 2. What type of Self Managed Work Teams (SMWT) are used? (Are they truly the SMWT that we are interested in?)
- 3. What type of process are teams involved with?
- 4. When was SMWT's introduced into the organization?
- 5. What is the current staffing size? What percentage is involved with SMWT's?
- 6. What type of team configuration is used?
- 7. What are the size of the teams?
- 8. What type of pay, reward and appraisal systems are used with SMWT's?
- 9. What methods are used for quality checks and accountability?
- 10. Is there improvement in work process, cycle time, quality?
- 11. Do they have unions?



Checklist:

$\overline{\mathbf{V}}$	Do we have stakeholder commitment? What is it?
$\overline{\mathbf{V}}$	Do we have a cross functional team? Who are they?
$\overline{\mathbf{V}}$	Do we know the process? What is it?
$\overline{\mathbf{V}}$	Do we know who the process customer is? Who?
$\overline{\mathbf{V}}$	Do we know the products or services delivered to the customer?
	What are they?
	Do we know the customers expectations or requirements?
$\overline{\mathbf{V}}$	Do we know how the process works?
$\overline{\mathbf{V}}$	Do we currently measure the process? How?
$\overline{\mathbf{V}}$	Do we know what our current process performance is?
$\overline{\mathbf{V}}$	Do we know the performance goals? What are they?
$\overline{\mathbf{V}}$	Do we know how the performance goals were established? How?
$\overline{\mathbf{V}}$	Do we have an understanding of what we are looking for in the
	literature search?



Is researching and collecting data on the process that you are benchmarking.

The eleven steps to follow during the COLLECTING stage are:

	Conduct extensive literature search (secondary
	research)
	Identify "best-in-class" and potential partners
	Review legal and ethical issues and benchmarking
	protocol
	Plan data collection strategy
	Select and develop primary research mechanisms
	Conduct initial screening of potential partners
	Collect and analyze initial screening data, narrowing
	potential partner list
	Develop more in-depth questions for second contact
	with the organization
	Collect and analyze in-depth data narrowing
	potential partner list
	Collect preliminary data on the organization for site
	visit
П	Prenare for and conduct site visit

Plan data collection strategy:

◆ There are several methods used in data collection. Some of the more common are:

Method	<u>Advantages</u>	Disadvantages
Survey	Useful if you have a large number of organizations that you wish to acquire nonsensitive information from in a short period of time. A survey can be used as a tool to help you narrow down your list of prospective partners by measuring your CSF's. If funding is a concern in your organization, then a survey is the tool of choice.	There is usually a low return rate and the inability to provide detailed information. Unless you have trained personnel who can develop a quality survey, you may run the risk of getting zero response.

Questions: A relatively small number of close-ended questions. As there is no immediate feedback, questions must be clearly written so that they are easily understood.

Recommend use: To screen a large number of potential partners. Ask a few vital questions aimed at selecting partners. Then follow up with a telephone interview or site visit.

<u>Method</u>	<u>Advantages</u>	<u>Disadvantages</u>
Telephone Interview	Enables you to obtain answers to questions from a variety of sources within minutes. Conducting interviews over the telephone could provide you with a three hour extension to your business depending on your location within the United States. You also have great flexibility in the clothes you wear along with the location of the interview.	A downside is usually associated with poor preparation. Partners will show little interest in your project if you do not properly identify yourself or state your objectives up front or if you are not sensitive to their time constraints. Conversations on the telephone are usually limited in time and you will be subject to interruptions and then put on hold. Therefore, you will probably end up playing "telephone tag" with your partner in an attempt to complete one information-collection activity.
Questionnaire	Opens communication channels and develop a comfortable relationship with your selected partner(s).	Could backfire and produce tension that can threaten the amount of cooperation received from the partner(s).

Questions: A combination of open-ended and closed-ended questions. The questions should be specific, highly information targeted, and relatively short in length. Questions also must be relatively simple. Reserve complex and involved questions for a written survey or personal interview.

Recommended use: To obtain needed information. It also can substitute for a site visit.

Method

Advantages

Disadvantages

Personal Interview/Site Visit

Very rewarding. They allow you to ask follow-up questions that will provide greater detail to the discussion. Information obtained through secondary research can be verified. The chance to observe the process in action and clarify functions within the process that are not fully understood.

A personal interview or site visit will require a greater amount of time in preparation and, depending on the location, it can be expensive.

Questions: Usually open-ended. Questions can be complex and include such visuals as process maps and charts.

Recommended use: Site visits offer the greatest opportunity to understand the processes and practices of others.

Comparability

Example

Process	Criteria for Comparability	Possible Analogies
Brewing beer		A. Making soda syrup B. Manufacturing shampoo C. Packaging
Forming uranium		A. Extruding pet food pellets B. Running x-ray equipment C. Manufacturing aspirin
Retooling production lines in real time		A. Changing costumes between acts B. Servicing a race car during pitstops C. Preparing fast food
Campaigning for political office		A. Trying a criminal case B. Tele-evangelizing C. Awareness program explaining new taxes
Just-in-time distribution of manufacturing parts		A. Delivering newspapers B. Distributing meals-on- wheels C. Supplying fast-food restaurants



Checklist:

$\overline{\mathbf{V}}$	Do we know which organizations perform this process better?
	Who?

- Do we know which organization is the "best-in-class" in performing this process? Who?
- What can we learn from this organization?
- Do we know who to contact to determine if they are willing to participate in a study with us? Who?
- Do we know their process?
- **☑** Do we know their performance goals?
- Do we know how well their process performs over time?
- Do we know how they measure their process performance?
- **D**o we know what enables the performance of their process?

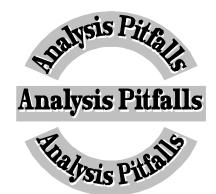


PLANNING COLLECTING
BENCHMARKING
STUDY
ANALYZING

Is analyzing the gathered data to determine the findings and propose recommendations.

The nine steps to follow during the ANALYZING stage are:

Organize and reformat the data to show gaps
Determine if all data is meaningful
Normalize performance
Determine partners processes
Compare measurements
Project performance
Isolate process enablers
Evaluate the nature of the process enablers and best
practices
Summarize partners methods



Pitfalls that can be encountered during a benchmarking study are:

- **♦** Analysis paralysis
- **♦** Overprecision
- ♦ Reasons for gap not identified
- ♦ Interrelationships not understood
- ♦ Cause/Effect not understood
- ♦ Not sticking to subject
- ♦ Value of practices not determined

Performance Gap Tools

<u>Technique</u> <u>Use</u>

Matrix To display specific measures for each

organization.

Spider Chart Outline key measures with those of best-in-

class. The results will show the gaps in performance identifing strengths and

weaknesses.

Line Chart To compare one current measure with the

best-in-class organization.

Fishbone Diagram A brainstorming tool that explores the

possible causes of a particular effect. This

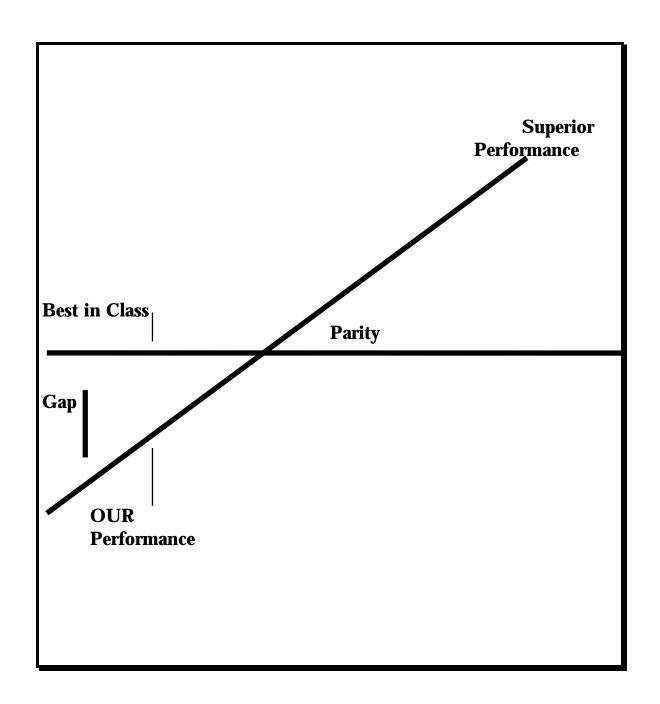
tool is designed to show the possible

relationships that may exist between variables.

Root Cause Analysis A tool that is designed to explore the reasons

behind a performance gap. This technique breaks down a gap into component causes and evaluates them each as an individual problem.

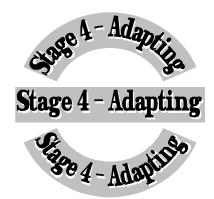
Gap Diagram





Checklist:

- **☑** Do we know our process measures?
- **☑** Do we know our partners measurements?
- **☑** Do we know the performance gap?
- **☑** Do we know the impact of the performance gap?
- Do we know what characteristics distinguish their process as superior?
- \square Can we adapt partners enablers?
- Do we know what activities within our process are candidates for change?



Is the adapting, improving and implementing of the designed action plan.

The eleven steps to follow during the ADAPTING stage are:

Set goals to reduce, meet and then exceed the
performance gap
Incorporate organizational culture and structure during
modification of enablers and best practices
Gain acceptance, support, commitment and ownership
by communicating findings
Develop an operations plan
Develop an implementation plan
Communicate the action plan to management
Obtain resources required for implementation
Implementation of the action plan
Monitor and report progress toward the goal
Identify opportunities for future benchmarking efforts
Re-calibrate the measure regularly

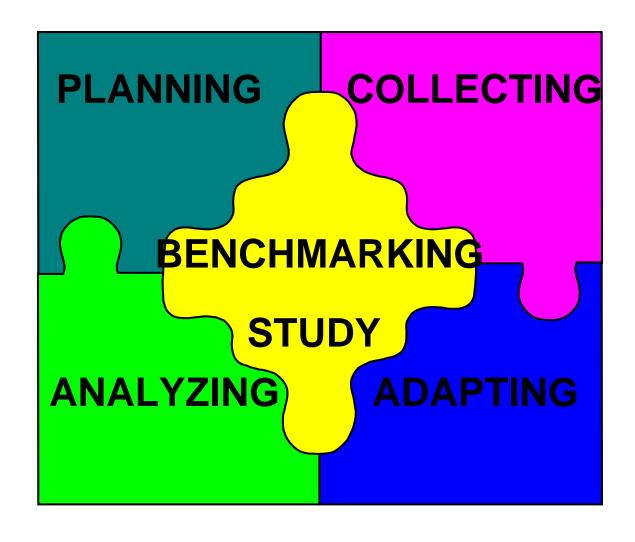


Checklist:

 $\overline{\mathbf{V}}$ Do we know how the knowledge of their process enables us to improve our process? \square Do we know if we should redefine our performance measure or reset our performance goal based upon this benchmark? $\overline{\mathbf{V}}$ Did we communicate results to everyone involved? $\overline{\mathbf{Q}}$ Do we know which activities in our process need to be modified to adapt findings? $\overline{\mathbf{V}}$ Do we know what we have learned during this benchmarking study that will allow us to improve our process? $\overline{\mathbf{V}}$ Do we have an approved implementation plan? $\overline{\mathbf{V}}$ Do we have management/stakeholder/sponsor support? Do we know how to implement these changes into our process?



- Clear understanding of own work process as basis for comparison
- Benchmarking of best functional practices, not just metrics
- Upper management acceptance and commitment
- Development of implementation plan
- Willingness to change and adapt based on findings
- Continuous improvement





Benchmarking Schedule Engineering Schedule

Element	Start Date	Finish Date
Literature Search Criteria		
Secondary Research		
Initial Contact/ Screening Questionnaire		
Review of Initial Data/ Ranking of Potential Partners		
Second Contact/ Indepth Questions - Ranking of Partners		
Develop Research Method		
Develop Questionnaire		

Element	Start Date	Finish Date
Make Site Visit Arrangements		
Site Visit		
Review Data		
Analysis Data		
Write Site Report		
Recommendations		
Implementation		